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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/062,415	02/05/2002	Mattia De Dominicis	108910-00051	4132

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EXAMINER

TUROCY, DAVID P

ART UNIT	PAPER NUMBER
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1792

MAIL DATE	DELIVERY MODE
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12/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/062,415	Applicant(s) DE DOMINICIS ET AL.	
	Examiner David Turocy	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 and 12-20 is/are allowed.
- 6) ☒ Claim(s) 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendments, filed 11/8/2007, have been fully considered and reviewed by the examiner. The examiner notes the amendments to claim 10 and claims 1-10 and 12-20 remain pending in the instant application.

Response to Arguments

2. Applicant's arguments filed 11/8/2007 have been fully considered but are deemed moot because they are directed to newly added limitations that were not present at the time of the prior rejection. Such added limitations are addressed in the prior art rejection that follows.

The applicant has argued against the Visca reference, stating that the reference fails to disclose applying the compound to the surface of the metallic substrate. The examiner disagrees, and notes paragraph 0007, which discloses applying a perfluoropolymer to a metallic surface. At the very least, since Visca discloses applying the perfluoropolymer to a metallic surface, and then discloses better treatment and perfluoropolymer to substrates (0009), it would have been obvious to one of ordinary skill in the art to have applied the perfluoropolymer, as discussed in paragraph 0011 and 0043, to a metallic surface with a reasonable expectation of successfully treating the substrate with an oil and/or water repellant surface.

The applicant has argued against the Visca reference stating the reference teaches of applying the perfluoropolymer to a metallic surface to confer water/oil

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repellency and such a characteristic is not analogous to anticorrosive properties. While the examiner agrees Visca is directed to providing a metallic surface with water and/or oil repellency, the examiner maintains the position that both the prior art of Visca and the present claims require the same process steps. The prior art and the present claims, reflected by claim 1, teach all the same process steps and thus the results obtained by applicants process must necessarily be the same as those obtained by the prior art. Therefore by applying a bifunctional polyfluoropolyether phosphoric ester compound to a metal substrate, it must necessarily result in conferring anticorrosive properties. Either 1) the applicant and the prior art have different definitions for applying to a metal substrate a bifunctional polyfluoropolyether phosphoric ester compound, or 2) the applicant is using other process steps or parameters that are not shown in the claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 10 is rejected under 35 U.S.C. 102(b) as being anticipated by EP

1006168 by Visca et al, hereafter Visca.

Claim 10: Visca teaches applying a bifunctional polyfluoropolyether phosphoric ester compound to the surface of various substrates, including metal (Abstract,

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Paragraph 0007). Visca discloses using a compound, see formula III, that corresponds to species (D) (Paragraph 0011). Visca teaches of providing metal substrate with water repellency characteristics, which results in conferring a certain amount of anti-corrosive properties (Abstract).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1006168 by Visca et al, hereafter Visca alone or in view of US Patent 4125152 by Kestner et al.

Claim 10: Visca teaches applying a bifunctional polyfluoropolyether phosphoric ester compound to the surface of various substrates, including metal (Abstract, Paragraph 0007). Visca discloses using a compound, see formula III, that corresponds to species (D) (Paragraph 0011). Visca teaches of providing metal substrate with water repellency characteristics, which results in conferring a certain amount of anti-corrosive properties (Abstract). Visca fails to explicitly disclose a compound that is within the genus as claimed. However, Visca discloses a finite number of substituents, each of which one of ordinary skill in the art would deem as operable for providing the desired

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and predictable results. Therefore it would be obvious to one of ordinary skill in the art to have selected the substituents of compound III to provide a predictable result.

Visca discloses performing a thermal treatment of the substrate of 50° C (0030) in order to effectively dry the coating. A *prima facie* case of obviousness exists where the claimed ranges and prior art do not overlap but are close enough that one of ordinary skill in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). See MPEP 2144.05.

Alternatively, it is the examiners position that both process parameters of time and temperature are known result effective variables. If time and temperature are low it would result in improper drying and too much time or temperature would result in no added benefits of increased drying. Therefore it would have been obvious to one of skill in the art at the time of the invention was made to determine the optimal value for the time and temperature used in the process of Visca taking into consideration such parameters as the substrate and the coating, through routine experimentation, to effectively dry the deposited coating. A predictable use of prior art elements (time and temperature of drying) according to their established functions to achieve a predictable result is *prima facie* obvious. See *KSR Int'l Inc. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007).

Finally, Visca fails to explicitly teach heating to the claimed temperature.

However, Kestner discloses that coating a metal substrate with a coating comprising a solution of fluoropolymer discloses that it is known and suitable in the art to air dry the

coating and then heat treat the coating to 130 °C to further dry the substrate. Therefore it would have been obvious to one of ordinary skill in the art to have modified Visca to provide a thermal treatment to 130°C, within the range as claimed, to provide further drying as suggested by Kestner with a reasonable expectation of success because Kestner discloses that such a thermal treatment is known and suitable in the art to provide drying.

Allowable Subject Matter

7. Claims 1-9, 12-20 are allowed.
8. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art cited or reviewed by the examiner, alone or in combination, reasonably suggested pretreating a metal substrate with the claimed perfluoropolyether and the calcium carbonate adhering to the substrate is easily removed with running water.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Turocy whose telephone number is (571) 272-2940. The examiner can normally be reached on Monday-Friday 8:30-6:00, No 2nd Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

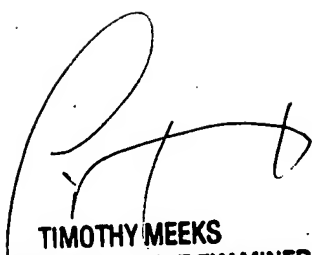
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/David Turocy/
Patent Examiner
Division 1792



TIMOTHY MEEKS
SUPERVISORY PATENT EXAMINER